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TRANSMITTAL OF APPEAL BRIEF (Small Entity)

Docket No.: CFP-31802/02

In Re Application Of: **James S. Bradley**

Serial No.	Filing Date	Examiner	Group Art Unit
09/887,836	June 22, 2001	Walter Aughenbaugh	1772

Invention: **LAMINATE ANTIOXIDANT FILM**

TO THE COMMISSIONER FOR PATENTS:

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on: **March 2, 2004**

Applicant is a small entity under 37 CFR 1.9 and 1.27.

A verified statement of small entity status under 37 CFR 1.27:

- ☐ is enclosed.
- ☒ has already been filed in this application.

The fee for filing this Appeal Brief is: **$165.00**

- ☒ A check in the amount of the fee is enclosed.
- ☐ The Director has already been authorized to charge fees in this application to a Deposit Account.
- ☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **07-1180**

Lionel D Anderson

Signature

Dated: 5/3/04

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Attorney Docket No. CFP-31802/02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: James S. Bradley

Serial No.: 09/887,836 Group Art Unit: 1772

Filing Date: June 22, 2001 Examiner: Walter Aughenbaugh

Title: LAMINATE ANTIOXIDANT FILM

APPEAL BRIEF

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I. Real Party in Interest.

The real party in interest is James S. Bradley, a U.S. citizen having a primary residence at 804 North Wattles Road, Battle Creek, Michigan 49014.

II. Related Appeals and Interferences.

There are no other related appeals or interferences.

III. Status of Claims.

Claims 1-5, 11 and 12 are pending in this application and are accordingly the subject claims of this appeal. Claims 1-5 stand rejected under 35 USC 103 in view of Saad et al. in combination with Satoh et al. Claim 11 stands rejected under 35 USC 103 in view of Omura et al. in combination Satoh et al. Although Claim 12 has been canceled in the reply to final

rejection, it stands rejected under 35 USC 112 and 35 USC 103 due to the reply to final amendment not being entered.

IV. Status of Amendments.

There has been one amendment filed in reply to final rejections in the Office Action having a mailing date of November 4, 2003. The claim amendments, particularly the amendment to claim 11, were not entered because they were asserted to raise new issues that would require further consideration and/or search, and they were not deemed to place the application in better form for appeal. Appellant respectfully traverses.

Claim 11 was amended in the reply to final in a manner that changed the claim from a product claim to a product-by-process claim. Specifically, the claim language was amended from being "an antioxidant adhesive film comprising: . . ." to "an antioxidant adhesive film formed by the process comprising the step of: applying . . .". Other amendments to the claim were deleting the word "applied" and inserting the word "on" in place of the word "of" in the last line. It is asserted that by changing the claim language from reading "a ... film comprising: ..." to "a ... film formed by the process comprising the step of: applying..." introduces points of indefiniteness into the claim. Appellant does not have an appreciation for how this change of claim form rather than the subject matter being claimed makes the amended claim ambiguous or indefinite. Because of Appellant's amendment it is asserted that a relationship between the adhesive resin and the antioxidant, which was apparently understood in the original claim, is now considered indefinite.

Appellant submits that the claim as amended recites the relationship between the adhesive resin and the antioxidant as being the same as it was in the original claim. Particularly, the components are provided as a mixture of adhesive resin and antioxidant wherein the mixture

contains a concentration of between 1000 to 300,000 parts per million of antioxidant to adhesive resin. The antioxidant adhesive film according to claim 11 is formed by applying the adhesive resin and antioxidant mixture on a substrate in an amount that ranges from 0.00005 to 0.001 dry pounds per square foot.

It should be apparent to the Board that the proposed amendment to claim 11 does not substantially alter the claim from its original form such that the claimed subject matter is now indefinite. Appellant submits that the amendment simply changes the type of claim being presented rather than the subject matter being claimed. Appellant invites the Board to remand the case back to the Examiner to have the amendment entered as it does not alter the claim in a manner that raises new issues or renders the claim indefinite as asserted in the Advisory Action.

V. Summary of the Invention.

The present invention provides a packaging laminate having an outer layer and permeable to a butylated phenolic antioxidant. The present invention further includes an adhesive layer between the outer layer and an inner layer whereby the adhesive layer is in contact with both the outer layer and the inner layer to form the packaging laminate. The adhesive layer between the outer and inner layer includes an adhesive resin and curing agent and the butylated phenolic antioxidant. The inner layer of the packaging laminate allows migration of the butylated phenolic antioxidant therethrough (claim 1). The antioxidant adhesive layer may be provided as a film that is formed by the process of applying a solventless cured adhesive resin selected from the group consisting of polyether urethanes, polyester urethanes and polyurethane. A butylated phenolic antioxidant is present in the adhesive resin in a concentration of between 1000 and 300,000 parts per million. The adhesive resin and butylated phenolic antioxidant is applied on a substrate from 0.00005 to 0.001 dry pounds per square foot (claim 11).

VI. Issues on Appeal.

1. Whether or not those having ordinary skill in the art would have a reasonable expectation of success with regard to accomplishing the invention of claims 1-5 in view of the combined teachings of Saad et al. and Satoh et al.

2. Whether or not claim 11 is obvious in view of Omura et al. in combination with Satoh et al.

VII. Grouping of the Claims.

Claims 1-5 will either stand or fall together as a result of this appeal; and claim 11 will either stand or fall as a result of this appeal. Appellant respectfully request that claim 12 be withdrawn from further consideration.

VIII. Arguments.

A. Claims 1-5.

Currently, claims 1-5 remain rejected under 35 U.S.C. §103(a) over Saad et al. (U.S. Patent 5,562,874) in view of Satoh et al. (U.S. Patent 6,194,061 B1).

It is well established law with respect to an obviousness rejection that one skilled in the art must find both a suggestion for the combined reference combination and a reasonable expectation of success. The court stated in *In re Vaeck*:

> Where claimed subject matter has been rejected as obvious in view of a combination of prior art references, a proper analysis under Section 103 requires, inter alia, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success.

In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

For the reasons stated above with respect to blown film coextrusion, one skilled in the art would not have a reasonable expectation of success in attempting to create the subject matter of claims 1-5 through the prior art reference combination of Saad et al. and Satoh et al. To take a contrary position is submitted to represent picking and choosing among the individual elements of the prior art references of record, and such an approach is contrary to the law regarding obviousness. *Symbol Technologies, Inc. v. Opticon, Inc.*, 935 F.2d 1569, 19 USPQ2d 1241 (Fed. Cir. 1991).

Appellant submits that one skilled in the art would not be motivated to make the combination of Saad et al. in view of Satoh et al. detailed in Paper No. 9, paragraph 14, for the reasons stated hereinbelow. Saad et al. teaches the formation of multi-layer films containing a volatile antioxidant only through film coextrusion (i.e. column 2, lines 15, 35, 39 and 43; column 3, line 66 – column 4, line 4; and column 4, lines 19-27). Blown film coextrusion as known to one skilled in the art makes possible the combination of materials with different properties to create a finished product most suitable for a particular application. One skilled in the art would appreciate that film coextrusion involves the simultaneous extrusion of at least two molten streams of different plastic materials from proximal dies at a rate and in proximity to assure the formation of a laminar structure.

Appellant submits that one skilled in the art would recognize that a graft polymerization mixture according to Satoh et al. is simply incompatible with the coextrusion process detailed by Saad et al. and therefore would lack motivation to modify the composition of Saad et al. with the polyester urethane of Satoh et al. The polyester graft copolymer (A) and resin (B) according to Satoh et al. are reacted in the presence of a curing agent to form an adhesion layer.

The polyester graft copolymer (A) is detailed to be in the form of a dispersion or solution in an organic or aqueous solvent. (Column 7, lines 42-52). The resin (B) is added in a variety of ratios

(column 12, lines 47-50) and with a cross linking agent present the dispersion or solution is applied to a thermoplastic film substrate and dried during which time cross linking occurs, resulting in a solid content film of 1 to 50 weight percent of the initial dispersion or solution (column 17, lines 33-42).

Assuming for argument's sake that one replaced the middle (antioxidant) layer feedstock of Saad et al. with a solution or dispersion of polyester copolymer (A) and resin (B) according to Satoh et al. and attempted blown film coextrusion according to Saad et al., such an attempt would yield only failure. The reasons for failure include the inability to evaporate organic or aqueous solvent through the adjacent sandwiching layers, the inability of polymerization to occur in concert with adjacent layer solidification under blown film coextrusion techniques based on the teachings of Satoh et al., and antioxidant volatilization associated with the heat of blown film coextrusion and even limited time exposure to air (see Saad et al., column 1, lines 32-67). With regard to antioxidant volatilization, heating is taught by Satoh et al. to speed drying and heating is always associated with blown film coextrusion. The notion of passive drying at room temperature or with moderate heating as detailed in Paper No. 11 as being an option is simply incompatible with multi-layer film formation according to Saad et al.

In view of the above remarks, Appellant asserts that one skilled in the art would not undertake the proposed reference combination and further, if one were to do so, the claimed invention would not be achieved.

B. Claim 11.

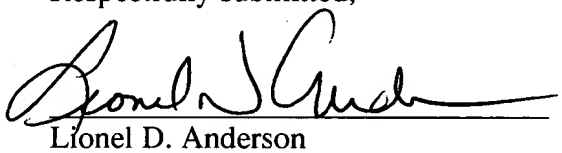
Claim 11 recites a product claim indicating that the adhesive resin applied is applied in a solventless form as opposed to applying a solvated adhesive that is subsequently dried on the substrate as per Satoh et al. As the prior art combination of Omura et al. and Satoh is completely

lacking in teaching a solventless application of resin, it is respectfully submitted that claim 11 is in allowable form. Further, Appellant submits that if the Board decides to remand the present case to the Examiner for entering the previous amendment then amended claim 11 would also be in allowable form for substantially the same reasoning.

IX. Conclusion.

From the foregoing, Appellant submits that claims 1-5 each embody patentable subject matter and are in condition for allowance. Further, in view of the foregoing remarks with regard to amended claim 11, Appellant respectfully invites the Board to remand the case back to the Examiner to have the amendment entered and order the claims as presented therein be allowed. Accordingly, such action is respectfully requested.

Respectfully submitted,



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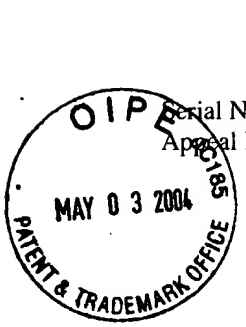

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APPENDIX A

CLAIMS ON APPEAL

1. A packaging laminate comprising an outer layer impermeable to a butylated phenolic antioxidant; an adhesive layer between said outer layer and an inner layer and in contact with both said outer layer and said inner layer to form said packaging laminate, wherein said adhesive layer comprises an adhesive resin, a curing agent and said butylated phenolic antioxidant; and said inner layer allowing migration of said butylated phenolic antioxidant therethrough.

2. The packaging laminate of claim 1 wherein the outer layer is selected from a group consisting of: polyvinylidene chloride (PVDC) coated polyester, PVDC coated polypropylene, aluminum coated polyethylene terephthalate (PET), polyethylene (PE), oriented polypropylene (OPP), nylon, aluminum oxide coated PET, aluminum oxide coated polyester, acrylic coated polypropylene and PET, layers thereof, coatings thereof, and combinations thereof.

3. The packaging laminate of claim 1 wherein said adhesive resin is selected from a group consisting of: polyether urethanes, polyester urethanes, and polyurethane.

4. The packaging laminate of claim 1 wherein said curing agent is selected from a group consisting of: polyamines, polyols, isocyanates, and organometallics.

5. The packaging laminate of claim 1 wherein said butylated phenolic antioxidant is selected from a group consisting of butylated hydroxytoluene and butylated hydroxyanisole.

11. An antioxidant adhesive film comprising: a solventless cured adhesive resin selected from the group consisting of: polyether urethanes, polyester urethanes, and polyurethane; and a butylated phenolic antioxidant present in a concentration of between 1000 and 300,000 parts per million applied from 0.00005 to 0.001 dry pounds per square foot of a substrate.

12. A resealable package comprising:

an outer layer defining sides and an interior volume; and

a flap extending from at least one of the sides, said flap adapted to fold against said outer layer and having a resealable peel antioxidant adhesive applied to a surface of said flap wherein said adhesive comprises a solventless cured adhesive resin selected from the group consisting of: polyether urethanes, polyester urethanes and polyurethane having a vapor transmission rate of greater than 0.2 grams per 100 square inches per day at 70°F; and a butylated phenolic antioxidant present in a concentration of between 1000 and 100,000 parts per million.